C L A I M S

1.   A rotor for a brushless motor comprising a hollow-cylindrical rotor core to be fitted to a rotary shaft and

5   magnets to be fitted to the outer peripheral surface of the rotor core, characterized in that

the rotor core has:

an outer ring section formed to extend from the outer peripheral surface of the rotor core toward the rotary shaft

10   with a predetermined thickness;

a plurality of ribs formed inside the outer ring section and extending from the inner peripheral surface of the outer ring section toward the rotary shaft; and

hollow sections formed between the ribs; and

15   the outer diameter φn of the hollow sections is defined by $\varphi c - 2 \times 3\, Wt \leq \varphi n \leq \varphi c - 2 \times 1.3\, Wt$, where φc is the outer diameter of the rotor core and Wt is the thickness of the magnets.

2.   The rotor according to claim 1, characterized in

20   that the outer diameter φn of the hollow sections is defined by $\varphi c - 2 \times 2\, Wt \leq \varphi n \leq \varphi c - 2 \times 1.3\, Wt$.

3.   The rotor according to claim 1 or 2, characterized in that the ribs are radially formed at positions located inside the outer ring section relative to the inter-magnet

25   spaces of adjacently arranged magnets or the inter-magnetic-polar spaces so as to extend radially from the rotary shaft.

4.   The rotor according to claim 3, characterized in that the ribs are arranged so as to be centered respectively at the line segments Lr passing through the middle points Cp

of the inter-polar spans Pw of adjacently located magnets and the center O of the rotary shaft.

5.   The rotor according to claim 3, characterized in that the angular pitch θr of arrangement of the ribs is larger than the central angle θm of the magnets ($\theta r > \theta m$).

6.   The rotor according to any one of claims 1 through 5, characterized in that the hollow sections are formed to show a substantially sector-shaped cross section and arranged on the prolonged lines passing through the polar centers of the magnets.

7.   The rotor according to any one of claims 1 through 6, characterized in that the width Wv of the ribs is smaller than the thickness Wt of the magnets ($Wv \leq Wt$).